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COUNTRY Austria (Soviet Zone) REPORT NO. [redacted]

TOPIC Soviet Notes on Gas Defense from Vienna

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REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE)

REMARKS

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1. A notebook containing entries on gas defense was procured in Vienna and received on 3 July 1951. The following are excerpts of those entries:

Trichlortriethylamine. Is easy to be dissolved in benzene, kerosene, spirits and dichlorethane.

Phosgeneoxime. As a first-aid measure, the eyes should be washed with a solution of 98 percent water and 2 percent sodium.

Tabun. Pure Tabun is a colorless volatile liquid with the specific gravity of 1 kg of 9 grams (sic) and a boiling point of + 97°. It is a generally poisonous and suffocating agent, affects the respiratory tract and causes intense eye irritation. Poisoning symptoms are paralysis, extremities turning blue, bronchial cough pupils getting smaller, swelling of the lungs. The killing concentration of Tabun is 0.3 mg per 1 cubicmeter of air in 15 minutes; 0.75 mg per 1 cubicmeter of air in 5 minutes; and 1.0 mg per 1 cubicmeter of air in 1 minute. The killing dose is 50 to 70 mg per 1 kg of the weight of an animal. As a protection against Tabun a gas mask is worn as again Yperite. When applying Tabun, 1 mg should be used for 1 cubicmeter of air. *

Gas masks. The model No-2 gas mask consists of three parts: the mask, the canistor containing gas-absorbing material, and the bag. The canister contains the smoke filter, the chemical absorber and activated coal. There are three types of canisters: the model MF-4, weighing 1.1 kg, the model L-3, weighing 0.95 kg, and the model NO-2, weighing 0.95 kg. The model L-3 canistor has a volume of 100 cubic cm. **

Suffocating agents. These are diphosgene; phosgene (protection: gas mask); chlorpicrin; chloracetophenone; Adamsite-diphenylamine-chlorarsine; hydrocyanic acid (fired in shells and dropped in bombs. Protection: gas mask); and carbon monoxide.

Decontamination of hand arms. There are two ways of decontamination: namely partial decontamination and thorough decontamination. Partial decontamination means that the drops of agents are removed from the surface of the arms which the soldier touches with his hands, such as breech-block, butt, sight equipment. It is done during combat by means of the gas protective equipment or by other means.

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Thorough decontamination is conducted after the combat and means complete disassembly of the weapon. It requires benzene, kerosene, dichlorethane, dichloramine and 250 grams cotton waste and lasts about 25 minutes. For the thorough decontamination of a rifle, the gas protective equipment set No 3, consisting of apron, gloves and rubber stockings, is used. Upon completion of the decontamination, the entire decontamination material is destroyed and buried. The gas protective kit serves as a means of identification of liquid and gas agents in the terrain. It contains a pump, indicator tubes, paper strips and indicator powder. ***

Indicator tubes. There are five reactions: first, phosgene and diphosgene convert the blue contents of the indicator tube into green; second hydrocyanic acid converts the contents of the tube, which is white with black paper strips, into red; third, hydride of arsenic converts the contents of the tube, which is white with yellow paper strips, into yellowish; fourth, acid agents convert the contents of the tube, which is white with white paper strips, into yellow/red; and fifth, settled agents convert the contents of the tube, which is white with two red paper strips, into yellow-red.

Indicator paper strips. Violet for Yperite and Lewisite, turns purple with red in the middle. The red paper strip turns violet by Yperite and Lewisite. A test tube is used for the analysis of infected earth and snow.

Gas protective clothing. There are five sets, No 1 consisting of an oiled coverall, rubber boots and rubber gloves, weighing 5.5 kg and giving protection for 3 to 4 hours; No 2 consisting of a rubber-line coverall, rubber-covered boots and gloves, weighing 5 to 6 kg and giving protection for 40 to 50 minutes; No 3 consisting of an apron, stockings and gloves, weighing 2.5 kg; No 4 consisting of an oiled tunic, oiled stockings and gloves, weighing 3 kg; and No 5, consisting of a cape, stockings and gloves made from oil paper.

25X1A * [redacted] Comment. The notes on the properties and concentration of Tabun indicate that the Soviet Army takes into consideration the commitment of this warfare agent captured from German stocks at the end of the war. The production by the U.S.S.R. of all other chemical warfare agents mentioned in the notebook is known from World War II.

25X1A ** [redacted] Comment. The filter canisters are known from World War II. They apparently still are standard equipment today. The notes do not indicate whether there is an additional filter for the protection against carbon oxide.

25X1A *** [redacted] Comment. Probably the model IIXP (PKhR) gas detector kit which is known from World War II.